

ITEMS

VOLUME 10 • NUMBER 2 • JUNE 1956
230 PARK AVENUE • NEW YORK 17, N. Y.

THE HISTORY AND SOCIOLOGY OF SCIENCE

*by Richard H. Shryock**

EVERYONE realizes that science has exerted an increasing influence upon Western society and culture over the past three centuries. Within the last 50 years, it has assumed an almost dominating role. Somewhat less obvious is the fact that society, in turn, has always had a hand in the moulding of science. This continuing interplay has had momentous consequences for modern civilization and merits serious investigation by historians and by social scientists at large.

With this end in view, the Council and the National Research Council have appointed a joint committee to be concerned with the history and sociology of science. The function of this group is exploratory in nature, since these fields are at present ill-defined and little cultivated. Their status in the American academic world is uncertain and somewhat confused, and their implications for history and for social science in general are not widely appreciated. The committee hopes to clarify some of these matters. It also hopes to point the way, in terms of academic planning, toward a better understanding of the significance of science in history and in contemporary life.

* The author is Professor of the History of Medicine at Johns Hopkins University, and chairman of the new Committee on the History of Science, jointly appointed by the National Research Council and the Social Science Research Council. The other members of this committee are: I. Bernard Cohen, Harvard University; George W. Corner, Rockefeller Institute for Medical Research; Henry Guerlac, Cornell University; Mark H. Ingraham, University of Wisconsin; Robert K. Merton, Columbia University; H. L. Shapiro, American Museum of Natural History; and Gordon R. Willey, Harvard University. The present report is Mr. Shryock's summary of his remarks at the spring meeting of the board of directors of the Social Science Research Council, March 1956.

DELIMITATION OF THE FIELD

The first problem confronting the committee is that of defining the areas with which it is concerned. The term "science" in the context of history or sociology has been variously construed. Conventionally, "the history of science" has usually related only to the development of concepts and methods in mathematics and in the natural sciences. In this sense the subject is largely limited to the history of ideas, and some scholars hold that interpretation will be distorted if any social content is included. The impact of society upon science should be studied, they say, but only in isolation from the history of science proper. Others take the position that, since science and society are constantly interacting, the interplay between them should in itself be investigated by historians and sociologists. Ideas and social backgrounds should be presented, at times, in juxtaposition with one another.

Several other questions about content must also be faced by historians or sociologists of science. Should technology, including the biological and medical, be brought into the picture? Traditional emphasis upon the history of ideas has sometimes minimized the attention given to technology but it has never been entirely overlooked. For those interested in the social relations of science, the significance of technology is obvious.

Last but not least, should the denotation of "science" include "the social sciences"? The history of these latter fields has usually been avoided by historians of science, presumably because of the inherited view that these disciplines are not fully scientific in nature. Such investigations as have been made in this area have been largely

the work of social scientists themselves. Regardless of the merit of these studies, it is doubtful that the history of the social sciences is even as well known as that of the natural sciences. In any case the lack of a comprehensive treatment which covers both these areas limits the perspective that we have on each.

NATURAL AND SOCIAL SCIENCES COMPARED

When one recalls the history of the natural and of the social sciences, he becomes aware of certain similarities as well as of contrasts in the two fields. Or perhaps it would be safer to say that certain hypotheses can be suggested concerning these similarities and contrasts. Further studies, focusing on such matters, are doubtless needed in order to confirm or refute the suggestions that follow.

Nineteenth-century opinion that social disciplines were not sciences was based in part on criticism of their methods, which gave rise to questions about exactitude, certainty, and prediction. Now the first thing that an overall history makes clear is that science cannot be defined in terms of any particular methods or results. Or at best it can be so defined only as an ideal, to which various disciplines always viewed as sciences approximate in one degree or another. Astronomy, the very queen of the sciences, has depended on simple observation over most of its past; indeed, it is still difficult to envisage an experimental astronomy without some misgivings.

The question then becomes, as far as social disciplines are concerned, when and to what degree did they approach an ideal concept of science? Their advance in this direction was obviously slower than was that of the physical and—in some respects—of the biological disciplines. Although social factors doubtless played a part in the retardation of social fields, the outcome may be chiefly ascribed to differences in the nature of the phenomena involved. Physicists dealt with what Warren Weaver has called problems of simplicity, while social thinkers faced a disorganized complexity.

As a matter of fact, the method that Galileo held was essential to science (quantification) was introduced into all the major areas noted during the sixteenth and seventeenth centuries. Physicists used it effectively, along with experimentation, in a field (dynamics) which presented few variables. But statistics and the calculus of probabilities soon suggested means for organizing problems of complexity, as well as of simplicity, in quantitative terms. Statisticians became aware of these possibilities, in dealing with social phenomena, by the later 1600's; and they soon applied them in the development of insurance. Even health insurance had been provided by the 1750's.

For some 75 years thereafter, however, little progress was made in developing a scientific approach to social phenomena. Experimentation in the ordinary sense was not available and quantification was handicapped by the lack of adequate data. Something was accomplished, however, in ridding social thought of traditional dogmas and in cultivating a relatively objective type of qualitative observation. Much the same thing may be said of the biological disciplines, many of whose problems were likewise quite complex in nature. In so far as biology could be reduced to physical terms, however, its advances paralleled or followed shortly after those in physical science. Thus chemistry, which became systematically quantitative in the late 1700's, evolved along one line into organic chemistry, and the latter evolved into biochemistry before 1850.

MEDICAL AND SOCIAL SCIENCE

Some light may be thrown on the difficulties of social science by comparing them with those experienced in medicine. The latter field, like the social, is sometimes still said to be nonscientific in nature—either because it lacks certitude or because it pursues other values than truth-for-its-own-sake. Medicine, as ordinarily conceived, sprawls across all the categories under discussion. In so far as its problems are biological, it has lagged or advanced with biology; and in so far as they are social in nature, it has paralleled the development of the social sciences.

Conventionally, human anatomy and physiology have been viewed as medical sciences. But, logically, these are no more medical in nature than was botany in the Middle Ages, chemistry in the eighteenth century, or social science in the twentieth. In any case we customarily say that "medicine" advanced during the 1600's when a biological function was reduced to dynamics and solved accordingly (Harvey). When another biological function was analyzed in chemical terms in the late 1700's, that likewise was hailed as a "medical" achievement (Lavoisier).

Meantime, in so far as the phenomena of illness involved large numbers and no exactitude *re* individuals—as in epidemiology—medicine faced the same difficulties as did the social disciplines. It began to employ statistics and the calculus in this area between 1725 and 1750 (inoculation against smallpox), at about the same time that insurance was being improved. And a century later, when Quetelet was striving to establish a "social physics" based on statistics, medicine also began to employ such data more effectively in both clinical work and in public hygiene.

These developments occurred on what might be

termed the fringes of medical thought. More central was pathology: the investigation of the nature and causes of illness. Here certain concepts, notably that of disease specificity, had first to be formulated before even qualitative observations could be undertaken in any systematic fashion. The problems seemed in large part biological but had to be undertaken in a social milieu similar to that which perplexed social observers. Moreover, physicians were well aware, before 1800, that pathology was not entirely a somatic (biological) matter. There were mental factors, and behind these social factors, in pathogenesis.

BEGINNINGS OF OBJECTIVITY IN MEDICINE AND SOCIAL SCIENCE

Early efforts were made to identify specific diseases by symptoms alone, 1700–1800, and these proved confusing. The attempt was so unsatisfactory that physicians continued to formulate all-inclusive “systems” of pathology and therapeutics, seeking speculative short cuts across areas of yet unrecognized complexity. They announced that all disease phenomena were related to one, underlying condition and could be treated by one basic method. Such systems impressed the public, as they still do in sectarian medicine.

Those who advocated these doctrines often spoke in terms of the latest scientific observations but really needed no further research. They knew all the answers. One theorist's views, however, were not those of another, and this type of thought was therefore always marked by controversies. The analogy here with contemporary social theories, which arose out of similar difficulties and led to similar debates, is plain enough. In 1650, many explained all human behavior in terms of original sin and dealt with it accordingly; by 1850, transcendentalists explained the same phenomena in terms of original goodness and sought to bring this to fruition through the formula of social reform.

After 1800, however, medical men found a better criterion for disease identification in the correlation of symptoms with the lesions found at autopsy. This approach focused attention on anatomy and later on physiology—areas in which medicine could take advantage of developments in both the biological and physical sciences. Beginning with simple observation, pathology soon employed experimentation, quantification, and instruments to aid the senses. During 75 years of research, many disease entities were identified; and the next quarter-century (1875–1900) saw the discovery of certain causal factors. Bacteriology revolutionized both surgery and public hygiene and even therapy began to hold some promise. No wonder that speculative syntheses

were repudiated in regular medicine after about 1830, when the promise of the new program began to be apparent.

One should add, however, that a price was paid for success. Since medical science advanced by focusing on biological problems, it more and more neglected those areas that were beyond the reach of biological methods. Personality and cultural factors in disease were largely forgotten by the later 1800's; and it has remained for current medicine and social science to take up once again these vital matters.

Meantime, as noted, Quetelet's generation had attempted to establish a similarly objective social science. Since social phenomena could not be reduced to biological and physical terms, however, social science continued to be handicapped by complexities and by the lack of objective methods other than quantification. Even in the latter, statistics continued to be inadequate and few devices particularly adapted to social statistics were found. Consequently, some of the phenomena characteristic of medical thought before 1800 persisted in social theory, 1850–1900. The elaborate syntheses of such thinkers as Herbert Spencer, in which all phenomena were brought into relation with the one concept of evolution, are suggestive of the medical systems of the preceding century.

Only within the present era have the statistics available to social science become relatively adequate; and with this development, sampling and other devices have rendered quantification more effective in social fields than ever before. As in the medicine of the early 1800's, moreover, advances in method have been associated with the formulation of more effective concepts.

Which came first, the novel method or the new concept, seems to have been a chicken-or-egg question. In medicine there have been situations in which known methods were long unused until brought to life by new concepts; for example, clinical thermometry was introduced about 1600 but only rarely employed until after 1850. There were likewise instances in which a concept remained dormant for lack of methods for demonstrating it; for example, the idea of pathogenic “germs” was advocated as early as the 1660's but was of little value until it could be verified after 1860. Perhaps there have been analogies to these situations in the history of the social sciences.

PERSISTENCE OF SPECULATION

Despite the “modernization” of medicine in the nineteenth century and of social science during the twentieth, more or less speculative syntheses have never been entirely eliminated in either field. These may be ingenious

and stimulating. Proposed as hypotheses, they are legitimate and desirable; presented as established facts or doctrines, they suggest the medical "systems" of 1800. Confronted with claims of this nature, unverified and perhaps unverifiable, all one can say is that "some of this may be true." Readers can select their own examples from social science literature of the last 25-50 years.

In the medical field the best illustration of the tendency is the emergence of psychoanalysis some 50 years ago. Between 1800 and 1900, medical men had followed the prevailing somatic approach to mental illness but found themselves largely baffled. Much mental illness, it appeared, could not be reduced to biologic terms and therefore eluded the application of biologic methods. Following clinical clues, Freud thereupon revived a psychologic approach in which no attempt was made to employ the usual methods of the natural sciences. Hence the resulting synthesis was not verified except by such clinical records as the analysts presented. But if Freud's theories were difficult to prove, they were equally difficult to disprove; and under these circumstances—and presumably for lack of anything else as promising—they began to be applied in practice.

As years passed and systematic verification was not forthcoming, the same professional phenomena appeared in connection with psychoanalysis as had once been associated with the "systems" of somatic medicine before 1800. Theories congealed into doctrines, rival doctrines appeared, disciples rallied around masters, and controversies ensued. Here were all the classic stigmata of scientific speculation.

INTERPLAY BETWEEN MEDICINE AND SOCIAL SCIENCE

The similarity of controversies over psychoanalysis with controversies within social sciences may not be complete but is at least suggestive. More than this, there was actually some identity of thought in these two areas. Analysis, since it involved concepts of personality and

culture, overlapped the interests of social scientists. Some of the latter found new insights in Freud's writings, and a generation ago such thinkers could place themselves among the *avant garde* by merely using such terms as *libido* or *id*. It was apparently assumed that analysis carried with it the sanction of the now respected medical sciences, when as a matter of fact it was still struggling in most medical centers for a minimum of professional toleration.

This transfer of psychoanalysis, from what one might call the rear ranks of medicine to the front ranks of social science, was an interesting phenomenon in itself. As such, however, it was not unique. Phrenology, a century before, had followed a similar course—beginning as serious medical investigation, elaborating into a speculative system, and then permeating the social thought and literature of the age. The cult of phrenology evaporated in time, leaving a residue of valid medical and psychologic content; and a similar destiny may await psychoanalysis.

The fact that the history of medicine reveals some parallels or analogies with that of the social sciences is not surprising. After all, medicine in some of its aspects deals with human behavior and so does social science. Also, medicine relates at times to average outcomes among large numbers of men, even as does social science. In view of these circumstances, the actual interaction between the two areas is what one would expect, provided—and the proviso is essential—that they are viewed together from a common, historical perspective.

As medicine gradually transcends the exclusively somatic focus of the nineteenth century, it will become increasingly aware of the overlapping of its interests with those of social science. In the cases of phrenology and psychoanalysis, medicine had some impact on social thought; in the future, we are likely to observe a reverse trend in which the social sciences exert an increasing influence on both medical thought and medical institutions.

GRANTS FOR RESEARCH ON AMERICAN GOVERNMENTAL PROCESSES: A NEW PROGRAM OF THE COMMITTEE ON POLITICAL BEHAVIOR

A NEW program of grants for research on American governmental processes will be offered by the Social Science Research Council for a period of three years beginning in the autumn of 1956. The program has been planned and will be administered by the Council's Committee on Political Behavior;¹ funds for support of the program

have been provided by the Ford Foundation. The purposes of the program are to extend knowledge and broaden understanding of American governmental proc-

University; Angus Campbell, University of Michigan; Robert A. Dahl, Yale University; Oliver Garceau, Bennington College; Alexander Heard, University of North Carolina; V. O. Key, Harvard University; Avery Leiserson, Vanderbilt University; Dayton D. McKean, University of Colorado; M. Brewster Smith, Social Science Research Council; staff, Bryce Wood.

¹ The present members of the committee are David B. Truman, Columbia University (chairman); Conrad M. Arensberg, Columbia

esses through the collection and analysis of new data obtained by field research, and to further the training of young social scientists in the techniques of field research in the area of government.

The committee is interested in supporting studies of the political process at various levels of government and with reference to various aspects of the relationships among government officials, and between government officials and private citizens and organizations. Studies of governmental processes in this sense require the use of such field techniques as interviewing and direct observation. Proposals need not exclude plans for analysis of documentary materials, but the committee will give preference to proposals that give major emphasis to field research. The scope of research on governmental processes has been broadly defined by the committee, and it is hoped that applications for grants may be received not only from political scientists but also from persons trained in other social science disciplines.

In addition to inviting applications for support of field studies by individuals, the committee wishes to encourage applications from scholars whose plans call for the cooperation of junior colleagues or the assistance of qualified graduate or undergraduate students whose training will be advanced thereby. The committee will welcome applications from scholars in liberal arts colleges or other institutions that do not have adequate funds for support of research by faculty members. Proposals that include plans both to obtain data through field research and to advance the training of junior scholars through collaboration with men of greater experience will be of especial interest to the committee.

In view of the variety of contingencies that may be involved, no minimum or maximum amounts have been stipulated, but grants ranging from about \$5,000 to \$25,000 are anticipated. Applications may include plans for research for periods longer than one year, and grants

may be made for such periods. Grants under this program may be used for maintenance, for the employment of research assistants, and for expenses such as travel and the processing of data. Applicants should possess the Ph.D. degree or its equivalent, and consideration will be given to their previous research accomplishments.

It should be noted that the Council also offers a separate program of grants-in-aid for research in state politics. Applicants desiring to engage in research on state politics are requested to refer to the announcement of that program made in the September 1955 issue of *Items* and, if in doubt, to correspond with the Council as to the program under which applications should be presented.

In view of the time required for planning research of the type envisaged by the program for research on governmental processes, applications for grants must be filed at an earlier date than that stipulated for certain other programs of grants sponsored by the Council. Applications for support in the first year of this program must be submitted on forms supplied by the Council and must be received at the Council's Washington office, 726 Jackson Place, N.W., Washington 6, D.C., not later than November 1, 1956. Awards will be announced by February 1, 1957. It is hoped that this schedule will allow adequate time for completing plans for research to be initiated in the summer or autumn of 1957. In addition, a second competition for grants will be held in the spring of 1957 in order to accommodate applicants wishing to begin research in February 1958; their applications will be due on March 1, 1957, and awards will be announced in May of that year.

Inquiries and requests for application forms should indicate briefly the nature of the proposed research and the approximate amount of financial support required, but need not include the detailed budgetary and other information that will be requested in the forms.

GRANTS FOR RESEARCH ON PROBLEMS OF NATIONAL DEFENSE, 1939-55: EXPANSION OF THE PROGRAM OF THE COMMITTEE ON CIVIL-MILITARY RELATIONS RESEARCH

A NEW program of grants to individuals for research on aspects of national security policy in the period 1939-55 will be offered by the Council in 1956-57 and 1957-58, with funds provided by the Carnegie Corporation of New York. Plans for the program have been developed by the Committee on Civil-Military Relations Research to supplement and extend in important respects its pres-

ent program of grants for research on the history of American military policy, 1750-1939.¹

¹ See *Items*, June 1954, pp. 13-15, for a description of the committee's present program, under which grants-in-aid will also be offered in 1956-57. The current members of the committee are William T. R. Fox, Columbia University (chairman); Gordon A. Craig, Princeton University; Richard W. Leopold, Northwestern University; Arthur Smithies,

The purpose of the new program is to encourage and support research by social scientists in all fields, as well as by historians, on a broad range of problems relating to national defense in the period since 1939, and having implications for the future. Since this range is conceivably very wide indeed, the committee has not attempted to define strict limits nor to specify all the substantive areas of research for which support may be granted. For the guidance of those whose interests may be embraced by this general topic, the committee states that it will welcome proposals for studies falling within the following categories:

1. Defense and diplomacy: relationships, both logical and practical, between strategic doctrines and foreign policies; the development of procedures, agencies, and relations in the formulation of national security policy.

2. Defense and representative institutions: influence of the recently enhanced importance of the military establishment on institutions at policy-making levels, as well as its implications for traditional American social attitudes and political theories; institutional effects of, and reactions to, the quickened pace of technological and scientific innovations; effects of high-level, peacetime mobilization upon governmental structures and processes.

Proposals for comparative study of the experience of foreign countries in the general field suggested above will be considered by the committee, if the proposed research is intended to throw light on problems of especial importance to the United States.

The committee regards the following types of studies as outside the scope of this program: research on social effects of civil-military relations that do not bear on important issues of national policy; research on internal administrative or managerial arrangements; technical studies of procedural relationships at lower levels.

Case studies, biographical studies, analyses of particular policies, theoretical analyses, institutional and public

Harvard University; Hans Speier, RAND Corporation; Harold Stein, Twentieth Century Fund; staff, Bryce Wood.

opinion studies are examples of acceptable types of projects from the standpoint of methodology.

Concerning the accessibility of materials, the committee recognizes that research on national security policy since 1939 is impeded by the legitimate and necessary classification of many types of documentary sources. The effect of these restrictions, at least for a considerable body of research, is not to make study impossible, but to make it more difficult and to make the product less adequate than it would be if more ample information were available. It is the view of the committee that a wealth of material that has not been fully exploited in research exists in biographies, memoirs, Congressional hearings, and also in the unrecorded experience of individuals. Inaccessibility of materials presents real difficulties, but these may be overestimated; and in any case the selection of significant problems for research ought not to depend solely on the relative availability of data.

Applicants for grants under this program should possess the Ph.D. degree or its equivalent. The committee will give special consideration to applicants from liberal arts colleges and other institutions that do not possess adequate financial resources for support of faculty research in this area, as well as to younger scholars prepared to undertake research in this relatively new field.

Funds awarded under this program may be used for maintenance and for such research expenses as travel, microfilming, and secretarial assistance. Awards may vary in amount from a few hundred dollars for research assistance during a summer, to larger amounts for periods ranging from six months to a year or longer, but no grant will exceed \$6,000.

Applications for support in the first year of this program must be submitted on forms supplied by the Council and must be received at the Council's Washington office, 726 Jackson Place, N.W., Washington 6, D.C., not later than November 15, 1956. Awards will be announced in February 1957. Application forms will be available after October 1, 1956, but inquiries and requests for forms may be made before that date.

COMMITTEE BRIEFS

CENSUS MONOGRAPHS

Ralph G. Hurlin (chairman), Robert W. Burgess, John D. Durand, Ernest M. Fisher, F. F. Hill, Frederick F. Stephan, Conrad Taeuber, Ralph J. Watkins, Paul Webbink.

In addition to the four monographs already published or scheduled for publication under the committee's program,

as listed on page 28 *infra*, two other manuscripts have recently been sent to press: *American Housing and Its Use*, by Louis Winnick, formerly of the Institute for Urban Land Use and Housing Studies, Columbia University, is expected to be issued in November 1956. *American Families, 1950*, by Paul C. Glick of the Bureau of the Census, will appear later in the winter.

CROSS-CULTURAL EDUCATION

Ralph L. Beals (chairman), Cora Du Bois, Herbert H. Hyman, Ronald Lippitt, Charles P. Loomis; *staff*, M. Brewster Smith, Joseph B. Casagrande.

A third monograph in the series of reports based on the committee's program of research has been submitted to the University of Minnesota Press: *No Frontier to Learning: The Mexican Student in the United States*, by Ralph L. Beals and Norman D. Humphrey, assisted by Ralph Arellano, Agnes Babcock, and Louis Stone. The first monograph in the series, *The American Experience of Swedish Students: Retrospect and Aftermath*, by Franklin D. Scott (see page 28 *infra*), is scheduled for publication this June. The second, *Indian Students on an American Campus*, by Richard D. Lambert and Marvin Bressler, is in press. A volume by Cora Du Bois, *Foreign Students and Higher Education in the United States*, published by the American Council on Education in April 1956, is based in part on preliminary findings of research sponsored by the committee. This volume, which was prepared for the Carnegie Endowment for International Peace and the Institute of International Education, discusses factors in the experience and adjustment of foreign students in American colleges and universities, and examines national and campus policies with respect to foreign students.

INTERNATIONAL EXCHANGE OF PERSONS

(Appointed by the Conference Board of Associated Research Councils)

M. H. Trytten (chairman), Francis J. Brown, D. H. Daugherty, William L. Doyle, James S. Earley, L. H. Farinholt, Richard H. Heindel, Nicholas Hobbs, Bernard Phillips, Ira O. Wade, Paul Weaver, Bryce Wood; *executive secretary*, Francis A. Young.

The committee cooperates with the Department of State and the Board of Foreign Scholarships in the administration of the Educational Exchange Program under the Fulbright and Smith-Mundt Acts. Awards for university lecturing and postdoctoral research abroad under the Fulbright Act are publicized by the committee which, with the aid of advisory screening committees, reviews applications from American scholars and recommends candidates for awards in these categories. It also reviews applications from foreign scholars who have been nominated by Fulbright foundations and commissions abroad, and assists foreign scholars to establish institutional affiliations in the United States.

For American applicants for Fulbright awards, the committee conducts two major competitions each year: Between March 1 and April 15, applications are accepted for Australia, Burma, India, New Zealand, the Philippines, Thailand, and this year for the first time, Chile. Between June 1 and October 1, applications are accepted for Austria, Belgium and Luxembourg, Denmark, Finland, France, Germany, Greece, Iraq, Italy, Japan, the Netherlands, Norway, and the United Kingdom and Colonial Territories.

Because requests for university lecturers under the Smith-Mundt Act are received very irregularly, this part of the Exchange Program is not operated on the basis of a general competition. Rather, professors interested in Smith-Mundt lectureships abroad are invited to register with the committee by filling out brief record cards with information on their academic background, preference as to countries, probable periods of availability, foreign language competence and related matters. The register is consulted both for lectureships under the Smith-Mundt Act, and for Fulbright lectureships that remain unfilled after the review of applications submitted in the open competition. In 1957-58 it is expected that Smith-Mundt lectureships will be offered in some 30 countries that are not participants in the program under the Fulbright Act.

The committee has recently issued two rather extensive studies dealing with problems of international educational exchange. One represents an effort to describe, analyze, and evaluate the programs now existing for exchange of persons at the senior level, and is the report of a conference on this subject held under the sponsorship of the committee at Princeton, New Jersey, December 2-4, 1954, as reported in *Items*, March 1955, pages 8-9. The report is entitled *Educational Exchange: Aspects of the American Experience*.

The second report is a study of the objectives, policies, and effectiveness of the exchange programs in the Near East and South Asia, with special attention to Iraq and India. The study has been made possible through a grant from the Ford Foundation. The research has been carried out by Gordon Macgregor with the assistance of two advisory committees, one on each region. The resulting report is entitled *The Exchange of Scholars with Countries of the Near East and South Asia: Report of the Problems Arising from Cross-Cultural Differences in the Fulbright Programs with India and Iraq*. A subsequent phase of this research, a study of the individual experiences of American scholars supported by Fulbright awards in Egypt, India, and Iraq, is nearing completion. In concentrating upon the individual participants—their motivations in seeking Fulbright grants, their utilization by overseas universities, and their social as well as intellectual impact in their host countries—the committee hopes to obtain practical guidance in the future selection and orientation of grantees.

Information on the reports mentioned above, on Fulbright announcements and application forms, and on Smith-Mundt registration cards may be obtained from the Executive Secretary, Conference Board of Associated Research Councils, Committee on International Exchange of Persons, 2101 Constitution Avenue, Washington 25, D.C. E.A.H.

NEAR AND MIDDLE EAST

T. Cuyler Young (chairman), Hamilton A. R. Gibb, J. C. Hurewitz, Majid Khadduri, William D. Schorger, Wilfred C. Smith; *staff*, Bryce Wood.

The committee was reconstituted late in 1955 to give attention to means of advancing social science research on

problems of the contemporary Near and Middle East. At its first meeting the committee designated two informal work groups, one to review present resources and current needs for language tools for research in the committee's area of concern, the second to appraise the status of bibliographical aids. The first group, which included Charles Ferguson of Harvard University and George Makdisi of the University of Michigan in addition to Messrs. Khadduri (chairman) and Hurewitz of the committee, prepared a report and recommendations concerning the teaching of Arabic with special reference to the needs of social scientists. Subsequently the committee sent a questionnaire to some 20 institutions offering courses in Arabic, Persian, and Turkish. The questionnaire was designed to yield a roster of instructors in these languages, as well as data on their use of specific teaching materials and on the orientation and purposes of their courses. The committee expects to continue its inquiries concerning methods of language instruction especially appropriate to training social scientists for work in this area. As an immediate facilitative step to this end, the committee is endeavoring to arrange for instruction in Arabic, Persian, and Turkish at some university in the United States during each of the next several summers.

The work group on bibliographical services consisted of Harvey P. Hall (chairman) and Irene Williams of the Middle East Institute, Rudolph Mach of Princeton University, William J. Watson of McGill University, and Mr. Khadduri. Because established channels of communication about published materials on the Near and Middle East are lacking, and substantial proportions of governmental and private publications in Near and Middle Eastern countries appear in small editions, many items do not come to the attention of teachers and librarians in other countries. The report of this work group therefore suggests the desirability of establishing an office of bibliographical services to issue periodical reports on the nature and availability of recently published materials.

As an initial step toward identifying needed research in the social sciences, the committee plans to hold meetings of disciplinary groups in anthropology, economics, modern history, sociology, and political science and law, in the summer of 1956. Each group will discuss an exploratory memorandum and will attempt to define the principal training and research needs in its discipline, and if possible to indicate an order of priority in which these needs might be filled. The reports of the respective groups will be considered by the committee next autumn, in developing plans for a comprehensive report on training and research in the social sciences for the purpose of advancing knowledge and understanding of the Near and Middle East.

The committee is giving consideration to questions relating to the microfilming of archives, and to opportunities for research collaboration among scholars in the United States and in the countries of the Near and Middle East. A recent grant to the Council from the Ford Foundation has provided support for the committee's program.

RESEARCH TRAINING

Everett C. Hughes (chairman), G. Heberton Evans, Jr., Henry W. Riecken, Evon Z. Vogt, Payson S. Wild; staff, Elbridge Sibley.

As previously announced, research training institutes will be held this summer, under the auspices of the committee, on Current Research on International Affairs, Law and Social Relations, Quantitative Research Methods in Agricultural Economics, and Survey Methods in Research on Health Problems. Enrollment in each institute is limited, and all quotas have been filled. The institute program is intended to further the exploitation of new fields or the dissemination of new methods of research by enabling social scientists to become familiar with recent developments. The institutes are not intended to serve as "refresher" courses, nor to provide instruction that is generally available in regular university curricula.

The committee met on May 10 to plan future institutes under this program and to consider other Council activities relating to training for research. An institute on Organization Theory and Research is being arranged for the summer of 1957 under the direction of Herbert A. Simon of Carnegie Institute of Technology with staff members drawn also from other centers where significant new developments in this field are under way. A tentative program includes seminars on theory, and on methods or research in laboratory and field. A final announcement is planned for early autumn, when applications for enrollment will be invited.

Several other proposals for summer research training institutes were considered favorably by the committee, and some of these will be mentioned here in the hope of stimulating further suggestions or criticism, although there is as yet no commitment to organize institutes on these subjects. The committee was encouraged by the interest that has been evoked by the forthcoming institute on Law and Social Relations to propose planning for additional programs in the same general area. An institute on research on comparative legal dynamics in different cultures might be a direct sequel to the 1956 institute and, like it, would be primarily of interest to social scientists. On the other hand, the committee also believes that an institute on applications of sociological and psychological methods to research on certain legal problems might serve to improve communication between social scientists and legal scholars.

An institute on methods of studying complex cultures, to be designed to meet the needs of anthropologists whose prior training and experience have been mainly with small groups, was also proposed. The current urgency of studies of mass acculturation in rapidly urbanizing and industrializing areas lends weight to this suggestion. The committee also thought that training in certain newly developed methods of economic analysis might well be given in summer institutes. The potentially far-reaching consequences of the use of high-speed computers in social science research have interested the committee since its appointment, and the advice of specialists on plans for a summer institute on the

use of computers has been sought. No clear consensus has been found, however, on the desirable orientation and content of a short course of this kind for social scientists. The committee hopes to arrange for a survey of the actual experience of social scientists who have used modern computing machines, and of the training needs and other problems that they may have encountered.

SLAVIC STUDIES

(Joint with the American Council of Learned Societies)

C. E. Black (chairman), William B. Edgerton (secretary), Abram Bergson, Merle Fainsod, H. H. Fisher, Chauncy D. Harris, Ernest J. Simmons, S. Harrison Thomson, René Wellek, Sergius Yakobson.

The new program of grants for Slavic and East European studies, which was announced in *Items*, September 1955, page 36, has been initiated. Awards in the three categories for which provision was made by a grant from the Ford Foundation have been made by the Joint Committee's Subcommittee on Grants, whose members are named on page 27 *infra*, together with the scholars who have received grants-in-aid of their own research projects. In addition, plans for two research conferences were approved and grants for their support were made, as follows: to the Committee on Eastern European Studies of the University of Texas, toward the expenses of a conference on recent Soviet trends, to be held in the autumn of 1956; to the University of Indiana Institute of East European Studies, toward the expenses of a conference, held there on May 18-20, 1956, on resources and planning in Eastern Europe.

PERSONNEL

FACULTY RESEARCH FELLOWSHIPS

The Committee on Faculty Research Fellowships—Lyle H. Lanier (chairman), Harold E. Jones, John P. Miller, Emmette S. Redford, John W. Riley, Jr., William H. Sewell, and C. Vann Woodward—at its meeting on March 22 recommended 7 appointments for three-year terms, as listed below:

Robert E. Agger, Assistant Professor of Political Science, University of North Carolina, for research on the growth and decay of local political systems.

Wendell Bell, Associate Professor of Sociology, Northwestern University, for research on social mobility and family life in Jamaica.

Donald C. Cutter, Assistant Professor of History, University of Southern California, for research on the influence and legal status of the North American Indian in white society.

James J. Jenkins, Assistant Professor of Psychology, University of Minnesota, for research on the learning of linguistic behavior.

Gilbert K. Krulee, Assistant Professor of Engineering Administration (psychology), Case Institute of Technology, for research on communication and learning in business organizations.

David L. Olmsted, Assistant Professor of Anthropology, University of California, Davis, for research on the theory of culture change as exemplified in the Achumawi and Atsugewi tribes in northern California.

Charles R. Ritcheson, Associate Professor of History, Kenyon College, for research on Anglo-American relations and political thought following the American Revolution.

RESEARCH TRAINING FELLOWSHIPS

The Committee on Social Science Personnel—Earl Latham (chairman), Robert E. L. Faris, Richard B. Heflebower, Wayne H. Holtzman, John Useem, and Paul Webbink—at its meeting on March 19-20 voted to award 36 research

training fellowships and named 7 alternates, of whom 6 have subsequently been offered appointments. The following list of 43 nominees, 30 for predoctoral fellowships and 13 for postdoctoral, includes those who have declined their awards:

Norman H. Anderson, Ph.D. candidate in psychology, University of Wisconsin, postdoctoral fellowship for research on the application of mathematics to a problem in discrimination learning.

Robert T. Anderson, Ph.D. candidate in anthropology, University of California, Berkeley, postdoctoral fellowship for ethnological study of a village in Denmark.

Theodore X. Barber,* Ph.D. candidate in social psychology, American University, postdoctoral fellowship for anthropological training.

Philip W. Bell, Ph.D. in economics, Princeton University, Assistant Professor of Economics, Haverford College, postdoctoral fellowship for research in England on monetary factors in adjustment to disturbances in the balance of payments.

Jean Berko, Ph.D. candidate in linguistics and psychology of language, Radcliffe College, for research on semantic transfer in vocabulary learning.

Joseph L. Bernd, Ph.D. candidate in political science, Duke University, for research on primary elections in Georgia.

James M. Blaut,* Ph.D. candidate in geography, Louisiana State University, postdoctoral fellowship for study of anthropological aspects of cultural geography and agriculture.

Peter J. Coleman, Ph.D. in history and economics, University of Texas, Assistant Professor of History, Park College, postdoctoral fellowship for research on mercantilism in the 13 original states, 1776-1860.

Joseph W. Elder,* Ph.D. candidate in sociology, Harvard University, for research in India on industrialization in a small factory town.

* Declined award.

- Charles E. Ferguson,* Ph.D. candidate in economics, University of North Carolina, for further training in economics and statistics, and for research on the theory of production.
- Robert A. Fernea, Ph.D. candidate in anthropology, University of Chicago, for research in Iraq on irrigation systems and related social organization (alternate).
- Henry E. Friedlander, Ph.D. candidate in history, University of Pennsylvania, for research in Germany on the structure and practices of a Marxian labor party.
- James L. Gibbs, Jr.,* Ph.D. candidate in social anthropology, Harvard University, for research in Liberia on the native law of the Kpelle.
- William A. Glaser, Ph.D. in government, Harvard University, Assistant Professor, Michigan State University, postdoctoral fellowship for training in survey methods, in preparation for research on political behavior.
- Sidney M. Greenfield, Ph.D. candidate in anthropology, Columbia University, for research in Jamaica on peasant markets.
- Martin J. Havran, Ph.D. candidate in history, Western Reserve University, for research in Britain on the position of Roman Catholics in the reign of Charles I.
- Dwight B. Heath,* Ph.D. candidate in anthropology, Yale University, for research in Bolivia on land reform and cultural change in Santa Cruz.
- Victor K. Heyman, Ph.D. candidate in political science, Washington University, for research on the Congressional legislative process.
- Michael M. Horowitz, Ph.D. candidate in anthropology, Columbia University, for research in Barbados on cultural ecology and social structure.
- Richard Jessor, Ph.D. in psychology, Ohio State University, Assistant Professor of Psychology, University of Colorado, for research in the development of theory relating to decision making in the fields of psychology and economics.
- Erwin H. Johnson, Ph.D. candidate in anthropology, Columbia University, postdoctoral fellowship for community studies of three villages in Japan.
- Stephan F. Kaliski, Ph.D. candidate in economics, University of Toronto, for further training in economic research at the University of Cambridge, England.
- Peter B. Kenen, Ph.D. candidate in economics, Harvard University, for research in England on monetary policy and balance of payments, 1954-55.
- Lawrence Kohlberg, Ph.D. candidate in psychology, University of Chicago, postdoctoral fellowship for research in Switzerland on expectations of preschool children in respect to family roles.
- Richard A. LaBarge, Ph.D. candidate in economics, Duke University, for research in Central America on the influence of the United Fruit Company on economic development.
- Seth Leacock, Ph.D. candidate in anthropology, University of California, Berkeley, for ethnographic study of the Maué Indians in Brazil.
- Charles L. Leven, Ph.D. candidate in economics, Northwestern University, for research on the structure of income in a segment of a metropolitan area.
- Thomas Marschak, Ph.D. candidate in economics, Stanford University, postdoctoral fellowship for econometric

* Declined award.

- study of consumer behavior in England and research on nationalized industries in France.
- Y. Scott Matsumoto, Ph.D. candidate in sociology, American University, for further training in sociology and anthropology.
- Esther R. Newcomb,* Ph.D. candidate in social anthropology, University of Cambridge, for anthropological research among the Dumbo of the Gold Coast.
- Walter Y. Oi, Ph.D. candidate in economics, University of Chicago, for research on the cyclical functioning of the labor market.
- Bernard Okun, Ph.D. candidate in political economy, Johns Hopkins University, for research on population growth and economic development.
- Eric H. Olson, Ph.D. candidate in political science, Syracuse University, Associate Professor, Carthage College, for training in African studies and for research in the United States on native participation in African governments.
- Algimantas M. Petrenas, Ph.D. candidate in economics, Columbia University, for research on shifts in the demand function.
- George P. Rawick, Ph.D. candidate in history, University of Wisconsin, postdoctoral fellowship for training in sociology and related disciplines, in preparation for research on the history of race relations.
- John C. Redman, Ph.D. in agricultural economics, University of Kentucky, Associate Professor of Agricultural Economics, University of Kentucky, postdoctoral fellowship for advanced study and research in economics.
- Walter R. Reitman, Ph.D. candidate in psychology, University of Michigan, for research on the relation between overt behavior and scores on projective tests.
- Morton Rothstein, Ph.D. candidate in American history, Cornell University, for further study in economics and research in England on the history of the British-American wheat trade.
- Clovis R. Shepherd, Ph.D. candidate in sociology, University of California, Los Angeles, for research on methodological problems in the study of social organization.
- James N. Tattersall, Ph.D. candidate in economics, University of Washington, for research on the economic development of the Pacific Northwest, 1920-55.
- Andrew P. Vayda, Ph.D. candidate in anthropology, Columbia University, postdoctoral fellowship for research in Polynesia on cultural differentiation.
- Clifton R. Wharton, Jr., Ph.D. candidate in economics, University of Chicago, for research on capital and technology in the agricultural development of Minas Gerais, Brazil.
- Robert H. Wiebe, Ph.D. candidate in American history, University of Rochester, for research on the response of American business men to the national progressive movement, 1901-12.

* Declined award.

FIRST-YEAR GRADUATE STUDY FELLOWSHIPS

The Committee on Undergraduate Research Training—R. F. Arragon (chairman), Dwight W. Chapman, Wilbert J. McKeachie, Albert J. Reiss, Jr., John M. Roberts, and Everett K. Wilson—at its meeting on March 12-13 voted to award 26 first-year graduate study fellowships for 1956-57.

All save one of the appointees received undergraduate research stipends in 1955; one received the undergraduate award in 1954. Two of the students have also been named as Woodrow Wilson Fellows, and their support will be shared by the two programs. The students selected by the committee, their undergraduate colleges, fields of graduate study, and the graduate schools they will attend (if known at this time) are listed below:

Vladimir V. Almendinger, Jr., University of California, Los Angeles; political science, Harvard University.
 Clopper Almon, Jr., Vanderbilt University; economics, Harvard University.
 Jeremy R. Azrael, Harvard University; political science.
 James C. Beck, Harvard University; psychology, Yale University.
 David E. Berlew, Wesleyan University; psychology, Harvard University.
 Dana Bramel, Reed College; psychology.
 Thomas K. Burch, Loyola College, Baltimore; sociology, Fordham University.
 Albert E. Cowdrey, Tulane University; history, Johns Hopkins University.
 Edward Feigenbaum, Carnegie Institute of Technology; psychology, Carnegie Institute of Technology.
 Franklin M. Fisher, Harvard University; economics, Harvard University.
 William H. Friedland, Wayne University; sociology, University of California, Berkeley.
 Van Beck Hall, Oberlin College; history, University of Wisconsin.
 Karl G. Heider, Harvard University; anthropology.
 Peter B. Lenrow, Swarthmore College; psychology, Harvard University.
 Oliver C. Moles, Jr., Ohio Wesleyan University; sociology, University of Michigan.
 John H. Niedercorn, Yale University; economics, Harvard University.
 Pershing Parker, Eastern Nazarene College; history.
 Bernard Portis, Harvard University; sociology, Harvard University.
 Lenore Sawyer Radloff, University of Minnesota; psychology, University of Minnesota.
 Harry A. Scarr, University of Michigan; sociology, Harvard University.
 Peter Schneider, Antioch College; social psychology, University of Michigan.
 Steven J. Schneider, Harvard University; economics.
 Barbara Schumann Shapiro, University of California, Los Angeles; history, Yale University.
 Daniel Stein, Oberlin College, 1955; sociology, Columbia University.
 Phil J. Stone, III, University of Chicago; social psychology, Harvard University.
 Robert F. Terwilliger, Yale University; psychology, Stanford University.

UNDERGRADUATE RESEARCH STIPENDS

At its meeting on March 12-13, the Committee on Undergraduate Research Training, whose members are named above, voted to award 46 undergraduate research stipends

for the summer of 1956 (additional awards made in May will be listed in the September *Items*):

Tatsuo Arima; supervisors, John C. Pelzel, Associate Professor of Anthropology, and Benjamin Schwartz, Associate Professor of Far Eastern History, Harvard University; comparative study of the ideology of two Christian movements in Japan.
 A. John Arrowood; supervisor, Harold H. Kelley, Associate Professor of Psychology, University of Minnesota; the process by which pairs of senders and receivers learn to transmit information.
 Anne M. Bartlett; supervisor, Ely Chinoy, Assistant Professor of Sociology, Smith College; the mechanization of white-collar workers' tasks.
 John P. Bell; supervisor, Thomas L. Karnes, Assistant Professor of History, Tulane University; agrarian reform in Guatemala as a political issue since 1944.
 Nancy L. Bonte; supervisor, J. Milton Yinger, Professor of Sociology and Anthropology, Oberlin College; factors associated with the "return to religion."
 Marie Bourbonnais; supervisor, Roger W. Heyns, Associate Professor of Psychology, University of Michigan; factors related to women's need for achievement as measured by Thematic Apperception Tests.
 Inge Komers Broverman; supervisors, Richard S. Lazarus, Associate Professor of Psychology, and Robert W. Baker, Assistant Professor of Psychology, Clark University; individual differences in reaction to psychological stress.
 Joan M. Bussler; supervisor, Sister Joan, S.N.D., Chairman, Department of History, Trinity College, Washington, D. C.; fraternal insurance organizations among Irish immigrants, 1865-1900.
 Donald J. Call; supervisors, Robert Dubin and John M. Foskett, Professors of Sociology, University of Oregon; time budgets of young people.
 Robert S. Canter; supervisor, Robert A. Manners, Assistant Professor of Anthropology, Brandeis University; the role of plantation foremen in the economy of Barbados.
 Drusilla Chartrand, Smith College; supervisors, William M. Carson, Assistant Professor of Middle East Studies, and Paul S. Lunt, Chairman, North African Project, School of Advanced International Studies, Johns Hopkins University; political influence of the middle class in Egypt since 1952.
 David M. Clay; supervisor, Hans Wallach, Professor of Psychology, Swarthmore College; perception of the vertical in relation to visual and kinesthetic cues.
 Eleanor L. Commo; supervisor, E. Faye Wilson, Professor of History, Wellesley College; the relation of mysticism to certain aspects of fourteenth century life.
 Richard Cramer; supervisor, Hubert M. Blalock, Jr., Instructor in Sociology, University of Michigan; attitudes of white high school students toward Negroes in various social situations.
 Roy G. D'Andrade; supervisor, Melford E. Spiro, Associate Professor of Anthropology, University of Connecticut; a cross-cultural study of relations between child training and religion.
 Thomas F. Deahl; supervisor, Russell R. Dynes, Instructor in Sociology, Ohio State University; the definition of the "necessities of life" and its relation to socioeconomic status.
 William S. Gilbert; supervisors, Marvin K. Opler, Visit-

- ing Professor of Anthropology (Social Psychiatry), Cornell University Medical College, and Allan R. Holmberg, Professor of Anthropology, Cornell University; ethnic differences in psychological adjustment to urban life.
- Ellen Goldstein; supervisor, Howard B. Lyman, Assistant Professor of Psychology, University of Cincinnati; the effect of religious identification of the investigator on professed religious tolerance of respondents.
- Alan Harwood; supervisor, Sarnoff A. Mednick, Instructor in Clinical Psychology, Harvard University; study of "complex indicator" words by the Autokinetic Word Technique.
- Esther Helfman; supervisor, Gerald S. Blum, Associate Professor of Psychology, University of Michigan; relations of psychosexual conflicts and defense preferences to a cognitive task.
- Dorothy G. Innes; supervisor, Peter Bachrach, Associate Professor of Political Science, Bryn Mawr College; the organization and internal operation of a large Protestant denomination in the United States.
- Robert H. Joost; supervisor, R. Barry Farrell, Assistant Professor of Political Science, Yale University; characteristics of American public opinion on foreign policy.
- Stanislav V. Kasl; supervisor, George F. Mahl, Associate Professor of Psychiatry (Psychology), Yale University; relations of speech disruption to emotional states and general personality traits.
- Marjory L. Katz; supervisor, Joe Kamiya, Instructor in Psychology, University of Chicago; some social psychological correlates of anti-Semitism among Jews.
- David H. Lipsher; supervisor, Jack W. Brehm, Research Assistant in Psychology, Yale University; factors influencing change in attitude.
- L. Nell Logan; supervisor, John C. Ball, Instructor in Sociology, University of Kentucky; attitudes of delinquent girls toward sexual behavior.
- Bernard Lourié; supervisor, Allan R. Holmberg, Professor of Anthropology, Cornell University; influence of cultural factors on perceptual judgment.
- Thomas E. Lux; supervisor, Edna M. O'Hern, Assistant Professor of Sociology, St. John Fisher College, Rochester, N.Y.; functions of the extended family in a Catholic parish.
- Wilda M. Marraffino; supervisor, Sister Joan, S.N.D., Chairman, Department of History, Trinity College, Washington, D. C.; fraternal insurance organizations among Irish immigrants, 1865-1900.
- Peter N. Mayfield; supervisors, William Bevan, Associate Professor of Psychology, and Pierre R. Loiseaux, Associate Professor of Law, Emory University; effects of type of leader and leadership on group discussion.
- Elinor P. McCallen; supervisor, Sister Joan, S.N.D., Chairman, Department of History, Trinity College, Washington, D. C.; fraternal insurance organizations among Irish immigrants, 1865-1900.
- Brian Meharg; supervisor, Kaspar D. Naegele, Assistant Professor of Sociology, University of British Columbia; social roles of ministers, rabbis, and priests.
- Bruce P. Muller; supervisors, Fabian L. Rouke, Associate Professor of Psychology, and Anthony J. Summo, Assistant Professor of Psychology, Manhattan College; moral beliefs and values of delinquent and nondelinquent psychotic adolescents.
- Richard P. Nathan; supervisor, Sidney Goldstein, Assistant Professor of Sociology, Brown University; effect of a new industry on the labor force of a New England textile community.
- Philip Odeen; supervisor, W. O. Farber, Professor of Government, University of South Dakota; problems of South Dakota municipal government in relation to Indians who are off reservations.
- Marvin E. Olsen; supervisor, Thomas E. Lasswell, Associate Professor of Sociology, Grinnell College; distribution of responsibility within the family and its relation to social stratification.
- George S. Reynolds; supervisor, Ray Hyman, Assistant Professor of Social Psychology, Harvard University; effects of success and failure on performance in problem solving.
- William J. Ryan; supervisor, James J. Jenkins, Assistant Professor of Psychology, University of Minnesota; experimental study of stimulus and response equivalence in verbal behavior.
- Elinor C. Santor; supervisor, Ernst A. Wiener, Assistant Professor of Social Studies, State University Teachers College, Plattsburgh, N. Y.; attitudes toward an ethnic group.
- David Schechter; supervisor, Martin Landau, Assistant Professor of Political Science, Brooklyn College; role of local political clubs in Congressional nominations.
- Vello Sermat; supervisor, A. H. Shephard, Associate Professor of Psychology, University of Toronto; traumatic avoidance learning, and conditioned inhibition in motor performance.
- Peter N. Stearns; supervisor, Raymond Grew, Teaching Fellow and Tutor in History, Harvard University; the liberal Catholic movement in France after the Revolution of 1830.
- Jeremy J. Stone; supervisor, William H. Brown, Jr., Assistant Professor of Economics, Swarthmore College; experimental testing of differences between mathematical and intuitive ideas of strength of bargaining positions.
- Michael D. Tanzer; supervisors, Seymour E. Harris, Professor of Economics, and Peter M. Gutmann, Teaching Fellow in Economics, Harvard University; the economics of racial discrimination.
- Rosalee E. Tucker; supervisor, Albert Bandura, Assistant Professor of Psychology, Stanford University; effects of manifest anxiety on psychological prediction.
- Judith Ulbricht; supervisor, Paul J. Campisi, Associate Professor of Sociology, Washington University; reactions of selected ambivalent voters to basic propaganda themes of parties in the 1956 presidential election.

POLITICAL THEORY AND LEGAL PHILOSOPHY FELLOWSHIPS

The Committee on Political Theory and Legal Philosophy Fellowships—J. Roland Pennock (chairman), Herbert A. Deane, David Easton, Norman Jacobson, Robert G. McCloskey, and Frederick Watkins—at its meeting on March 16 awarded 8 fellowships:

Layman E. Allen, LL.B. candidate, Yale University, for research on applications of mathematical and logical techniques to the analysis of law as a decision-making process.

Sanford A. Lakoff, Ph.D. candidate in government, Har-

vard University, for research on the history and analysis of the idea of equality.

Guenter Lewy, Ph.D. candidate in public law and government, Columbia University, for research on the political philosophy of Juan de Mariana.

Andrew Martin, Ph.D. candidate in public law and government, Columbia University, for training in economic theory.

Eugene S. Powell, Ph.D. candidate in political science, University of California, Berkeley, for research on German public law and constitutionalism.

Daniel W. Rossides, Ph.D. candidate in public law and government, Columbia University, Lecturer in Political Science, Hunter College, for research on the adjustment of the social and political theory of the Roman Catholic Church to industrialism and democracy, as exemplified in the work of Hugues Félicité de Lammenais.

Michael A. Weinberg, Ph.D. candidate in history, Harvard University, for research in the United States and Europe on the role of America in European political thought in the seventeenth and eighteenth centuries.

Leo Weinstein, Ph.D. candidate in political science, University of Chicago, Assistant Professor of Government, Smith College, for research on analysis of political processes, with particular reference to the theories of Arthur F. Bentley.

GRANTS-IN-AID

The Committee on Grants-in-Aid—Edward C. Kirkland (chairman), M. Margaret Ball, R. A. Gordon, Calvin S. Hall, and Stuart A. Queen—at its meeting on March 26-27 voted to award 36 grants and named 4 scholars as alternates, of whom one has subsequently received an award:

E. Kathleen Aberle, Ph.D. in social anthropology, University of Cambridge, for an analysis of the kinship system of the Nayars of Malabar.

Doris Goodrich Adams, Ph.D. in economics, University of California, Berkeley, for research in Iraq on migration from rural to urban areas.

Viola F. Barnes, Professor Emeritus of History, Mount Holyoke College, for research in the United States on British Colonial policy in the American Revolution.

Stephen B. Baxter, Instructor in History, Dartmouth College, for research in England on Parliamentary corruption, 1660-1702.

Howard S. Becker, Project Director, Community Studies, Inc., Kansas City, Mo., for research on the nature and development of identification with an occupation (joint project with James W. Carper).

Morgan C. Brown, Assistant Professor of Sociology, Southern University, for research on socioeconomic and cultural adjustment of Negro migrants in a Southern city.

Thomas C. Bryan, Professor of History, North Georgia College, for research on the history of gold mining in Georgia (alternate).

Robert J. C. Butow, Instructor in History, Princeton University, for research in Japan on General Hideki Tojo and the role of the Japanese military in affairs of state, 1868-1945.

James W. Carper, Ph.D. in psychology, Johns Hopkins University, for research on the nature and development

of identification with an occupation (joint project with Howard S. Becker).

Berlin B. Chapman, Professor of History, Oklahoma Agricultural and Mechanical College, for a case study in the land history of the Otoe and Missouria Indians.

Andreas Dorpalen, Professor of History, St. Lawrence University, for research in the United States on German civilian attitudes toward the Reichswehr in the Weimar Republic.

James S. Earley, Professor of Economics, University of Wisconsin, for research on the incidence and theoretical implications of some recently developed techniques of business management.

Harry H. Eckstein, Instructor in Government, Harvard University, for research in Great Britain on the role of the British Medical Association in politics (alternate).

Richard W. Emery, Associate Professor of History, Queens College, New York City, for research in the United States on commerce, industry, and finance in Perpignan, France, 1250-1400.

Henry C. Galant, Associate Professor of Government, Skidmore College, for research in France on social security elections and the nature and activities of the elected social security councils.

Philip Garigue, Assistant Professor in Anthropology, McGill University, for research on the kinship and family system of French Canadians (renewal).

Norbert J. Gossman, Assistant Professor of History, University of Detroit, for research in the United States on republicanism in Victorian England.

Charles M. Haar, Assistant Professor of Law, Harvard University, for research in England on land-use planning.

John F. Hart, Assistant Professor of Geography, Indiana University, for research in the United Kingdom on recent changes in the agricultural geography of Britain.

W. Turrentine Jackson, Associate Professor of History, University of California, Davis, for research in the United States on the British contribution to the development of mining in western North America, 1850-1900.

Gladys M. Kammerer, Professor of Political Science, University of Kentucky, for research in the United States on British and American child welfare administration.

Manford H. Kuhn, Associate Professor of Sociology and Anthropology, State University of Iowa, for research on changes in self-attitude.

Gardner Lindzey, Professor of Psychology, Syracuse University, for research on the relation between interpersonal choice and selected personality variables.

Henry S. Lucas, Professor of European History, University of Washington, for research in France on the role of the House of Avesnes (Hainault) in European history, 1204-1339.

Charles F. Mullett, Professor of History, University of Missouri, for research in the United States on the idea of history in the English Enlightenment.

John H. Mundy, Assistant Professor of History, Barnard College, for research in the United States on the social and constitutional history of Toulouse in the thirteenth and early fourteenth centuries.

Michael R. Powicke, Assistant Professor of History, University of Toronto, for research in England on conscription and liberty in medieval Britain.

Morton Rubin, Assistant Professor of Sociology, University of Wisconsin, for research on community factors in the adjustment of Negro migrants from Mississippi to a Midwestern city.

Ronald V. Sires, Professor of History, Whitman College, for research in the United States on the background of policies of the Liberal Party in England, 1906-14.

John L. Snell, Assistant Professor of History, Tulane University, for research in Europe on the origins of the Weimar Republic and the antecedents of the German Revolution of 1918.

H. Arthur Steiner, Professor of Political Science, University of California, Los Angeles, for research in Southeast Asia on views of American foreign policy.

Marvin B. Sussman, Associate Professor of Sociology, Western Reserve University, for research on in-law relationships (renewal).

Paul B. Trescott, Assistant Professor of Economics, Kenyon College, for a study of federal financial policies, 1790-1860, and their effects on the American economy.

Guido G. Weigend, Associate Professor of Geography, Rutgers University, for research in Europe on occupation patterns of Basques in the Franco-Spanish borderlands.

Bernard A. Weisberger, Assistant Professor of History, Wayne University, for research on the careers of successful American revivalists.

Reynold M. Wik, Professor of History, Mills College, for research in Europe on the influence of Henry Ford among European farmers.

Richard B. Woodbury, Associate Professor of Anthropology, Columbia University, for research on prehistoric developments and relationships in the Zuni area of New Mexico (alternate).

Leonard Worell, Instructor in Psychology, Reed College, for research on students' academic achievement in relation to their levels of aspiration and those of their parents.

C. K. Yang, Associate Professor of Sociology, University of Pittsburgh, for research in the United States on the Chinese family in the Communist revolution, and on a Chinese village in the early Communist transition.

James H. Young, Associate Professor of History, Emory University, for research on the social history of patent medicines in the United States.

GRANTS FOR RESEARCH ON HISTORY OF AMERICAN MILITARY POLICY

The Committee on Civil-Military Relations Research—William T. R. Fox (chairman), Gordon A. Craig, Richard W. Leopold, John P. Miller, Arthur Smithies, Hans Speier, and Harold Stein—at its meeting on March 21 awarded 6 grants for research on the history of American military policy:

Louis Morton, Deputy Chief Historian, Department of the Army, for research on naval war plans, 1919-38.

Raymond G. O'Connor, Instructor in History, Stanford University, for research on the relation of the United States to the London naval conference of 1930.

Sidney Ratner, Associate Professor of History, Rutgers University, for research on the economic history and

civil-military relations of Germany, Great Britain, Russia, Japan, and the United States during World War II.

William H. Riker, Associate Professor of History, Lawrence College, for research on measures of performance by American states of their Constitutional duties concerning the militia.

Dale O. Smith, Brigadier General, U. S. Air Force, for research on civil-military relations in the United States with respect to aviation, 1903-39.

George K. Tanham, RAND Corporation, for research on the coordination of plans and policies of the War and Navy Departments, 1898-1917 (renewal).

GRANTS FOR RESEARCH ON STATE POLITICS

The Committee on Political Behavior—David B. Truman (chairman), Conrad M. Arensberg, Angus Campbell, Robert A. Dahl, Oliver Garceau, Alexander Heard, V. O. Key, Avery Leiserson, Dayton D. McKean, and M. Brewster Smith—has awarded 15 grants for research on state politics under the new program announced last fall:

Henry M. Bain, Jr., Consultant (government studies), National Science Foundation, for research on party organization and activities and careers of political leaders in selected Maryland counties and city districts.

William Buchanan, Executive Director, Woodrow Wilson Centennial Commission, for research on some critical roles of American state legislators (in collaboration with Messrs. Eulau, Ferguson, and Wahlke).

Richard D. Derge, Jr., Instructor in Political Science, University of Missouri, for research on urban-rural relationships in the legislatures of Illinois, Missouri, and Pennsylvania.

Leon D. Epstein, Professor of Political Science, University of Wisconsin, for research on the recruitment, careers, and organization of political personnel in Wisconsin.

Heinz Eulau, Associate Professor of Political Science, Antioch College, for research on some critical roles of American state legislators (in collaboration with Messrs. Buchanan, Ferguson, and Wahlke).

LeRoy C. Ferguson, Professor of Political Science, Michigan State University, for research on some critical roles of American state legislators (in collaboration with Messrs. Buchanan, Eulau, and Wahlke).

Charles B. Judah, Professor of Government, University of New Mexico, for research on the recruitment and nomination of candidates for the New Mexico House of Representatives.

William J. Keefe, Associate Professor of Political Science, Chatham College, for research on the role of political parties in the legislatures of Illinois, Indiana, and Pennsylvania.

W. Duane Lockard, Assistant Professor of Government, Connecticut College, for research on the New England state legislatures.

Frank J. Munger, Instructor in Political Science, Syracuse University, for research on gubernatorial nominations in Kansas.

Joseph A. Schlesinger, Instructor in Political Science, Michigan State University, for research on the recruitment of political leaders in the American states.

Lester G. Seligman, Assistant Professor of Political Science, University of Oregon, for research on the recruitment of leaders of state party organizations.

Gilbert Y. Steiner, Associate Professor of Political Science, University of Illinois, for research on the determinants of committee influence in the Illinois legislature.

Clement E. Vose, Associate Professor of Government, Bowdoin College, for research on the political careers of legislators, governors, and members of the governor's council, in Maine.

John C. Wahlke, Associate Professor of Political Science, Vanderbilt University, for research on some critical roles of American state legislators (in collaboration with Messrs. Buchanan, Eulau, and Ferguson).

GRANTS FOR SLAVIC AND

EAST EUROPEAN STUDIES

The Subcommittee on Grants—Abram Bergson (chairman), William B. Ballis, Edward J. Brown, Oscar Halecki, and Chauncy D. Harris—of the Joint Committee on Slavic Studies, which is co-sponsored by the American Council of Learned Societies and the Social Science Research Council, met on March 14. The subcommittee awarded 16 grants-in-aid of research for 1956 and named 5 alternates, of whom one has subsequently received an award:

Arthur E. Adams, Associate Professor of History, Michigan State University, for research in the United States on the Soviet Civil War on the Ukrainian front, 1918–21.

Frederick C. Barghoorn, Associate Professor of Political Science, Yale University, for research in the Soviet Union on the role of cultural exchange and cultural propaganda in Soviet foreign policy.

Richard T. Burgi, Assistant Professor of Russian, Yale University, for research in the Soviet Union on the lives and writings of Vjaceslav Ivanov and A. N. Ostrovsky.

David Granick, Associate Professor of Economics, Fisk University, for research in the United States on technology and organization of production in the Soviet metalworking industry.

George W. Hoffman, Associate Professor of Geography, University of Texas, for research in Europe on the effects of social and economic changes in selected regions of Yugoslavia.

Svatava Pirkova Jakobson, Lecturer in Slavic Language and Literature, Harvard University, for research in Yugoslavia on calendar and family rituals in Yugoslavia (alternate).

George L. Kline, Assistant Professor of Philosophy, Columbia University, for research in the United States on the ethical, social, and political theory of the *Vperyod* group in the Bolshevik Party.

John I. Kolehmainen, Professor of Political Science, Heidelberg College, for research in Finland on Tolstoy's influence on Finnish literary and social developments, 1890–1920.

Josef Korbel,* Professor of International Relations, University of Denver, for research in the United States on the impact of Soviet-German relations on the countries in the area between the Soviet Union and Germany.

Michael B. Petrovich, Assistant Professor of History, University of Wisconsin, for research in the United States on modern South Slavic historiography.

Norman J. G. Pounds, Professor of Geography, University of Indiana, for research in Europe on the growth of heavy industry in Upper Silesia and related areas in Czechoslovakia and Germany.

Alvin Z. Rubinstein, Lieutenant, U. S. Navy, Ph.D. in political science, University of Pennsylvania, for research on Soviet policy toward underdeveloped areas with particular reference to United Nations economic commissions, 1946–56 (alternate).

Ivar Spector, Associate Professor of Political Science, University of Washington, for research in the United States on the Soviet Union and the Muslim world, 1917–56.

Gleb Struve, Professor of Slavic Languages and Literatures, University of California, Berkeley, for research in Europe on the life of Peter Struve and his place in Russian political thought.

Theo V. Suranyi-Unger, Professor of Economics, Syracuse University, for research in the United States and Europe on the recent development of taxation in Eastern Europe.

Konstantin Symonolewicz, Assistant Professor of Sociology, Wilkes College, for research in the United States on social and political thought in Poland, 1918–39 (alternate).

Boleslaw Szczesniak, Associate Professor of History, University of Notre Dame, for research on the Orthodox and Roman Catholic Churches during the Bolshevik Revolution (alternate).

Jozo Tomasevich, Professor of Economics, San Francisco State College, for research in Europe on political and economic policies and developments in Yugoslavia, 1945–56.

D. A. Tomic, Professor of Area Studies, University of Indiana, for research in the United States on political leadership in Yugoslavia.

Arthur Joyce, Hoover Institute and Library, Stanford University, for research in the United States on the decorative arts and crafts of Russia.

Wayne S. Vucinich, Associate Professor of History, Stanford University, for research in Europe on the foreign relations of Serbia, 1908–14.

* Declined award.

PUBLICATIONS

COUNCIL MONOGRAPHS

Migration and Mental Disease: A Study of First Admissions to Hospitals for Mental Disease, New York, 1939–1941, by Benjamin Malzberg and Everett S. Lee, with an introduction by Dorothy S. Thomas. Sponsored

by the Committee on Migration Differentials. March 1956. 152 pages. \$1.50.

Labor Mobility in Six Cities: A Report on the Survey of Patterns and Factors in Labor Mobility, 1940–1950, prepared by Gladys L. Palmer, with the assistance of

Carol P. Brainerd, for the Committee on Labor Market Research. June 1954. 191 pages. Paper, \$2.25; cloth, \$2.75.

Social Behavior and Personality: Contributions of W. I. Thomas to Theory and Social Research, edited by Edmund H. Volkart. June 1951. 348 pages. Cloth, \$3.00.

Support for Independent Scholarship and Research, by Elbridge Sibley. Report of an inquiry jointly sponsored by the American Philosophical Society and the Social Science Research Council. May 1951. 131 pages. \$1.25.

COUNCIL BULLETINS

Research on Labor Mobility: An Appraisal of Research Findings in the United States, Bulletin 65, by Herbert S. Parnes. October 1954. 216 pages. \$1.75.

The Social Sciences in Historical Study: A Report of the Committee on Historiography, Bulletin 64. July 1954. 191 pages. Paper, \$1.75; cloth, \$2.25.

Adjustment to Physical Handicap and Illness: A Survey of the Social Psychology of Physique and Disability, Bulletin 55, revised edition, by Roger G. Barker, in collaboration with Beatrice A. Wright, Lee Meyerson, Mollie R. Gonick. April 1953. 456 pages. \$2.00.

Area Research: Theory and Practice, Bulletin 63, by Julian H. Steward. August 1950. 183 pages. \$1.50.

Culture Conflict and Crime, Bulletin 41, by Thorsten Sellin. 1938; reprinted 1950. 116 pages. \$1.00.

Tensions Affecting International Understanding: A Survey of Research, Bulletin 62, by Otto Klineberg. May 1950. 238 pages. Paper, \$1.75; cloth, \$2.25.

Labor-Management Relations: A Research Planning Memorandum, Bulletin 61, by John G. Turnbull. October 1949. 121 pages. \$1.25.

The Pre-election Polls of 1948: Report to the Committee on Analysis of Pre-election Polls and Forecasts, Bulletin 60, by Frederick Mosteller, Herbert Hyman, Philip J. McCarthy, Eli S. Marks, David B. Truman, with the collaboration of L. W. Doob, Duncan MacRae, Jr., F. F. Stephan, S. A. Stouffer, S. S. Wilks. September 1949. 416 pages. Paper, \$1.75; cloth, \$2.25.

COUNCIL PAMPHLETS

The Business Enterprise as a Subject for Research, Pamphlet 11, by Howard R. Bowen. Sponsored by the

Committee on Business Enterprise Research. May 1955. 111 pages. \$1.25.

Bibliographies on Personality and Social Development of the Child, Pamphlet 10, compiled by Christoph Heinicke and Beatrice B. Whiting. June 1953. 138 pages. \$1.00.

Exchange of Persons: The Evolution of Cross-Cultural Education, Pamphlet 9, by Guy S. Métraux. June 1952. 58 pages. 50 cents.

The Council's monographs, bulletins, and pamphlets are distributed from the New York office of the Council.

CENSUS MONOGRAPHS

These volumes are sponsored by the Committee on Census Monographs in cooperation with the Bureau of the Census, and are published by John Wiley & Sons, New York:

American Agriculture: Its Structure and Place in the Economy, by Ronald L. Mighell. April 1955. 199 pages. Cloth, \$5.00.

Income of the American People, by Herman P. Miller. October 1955. 222 pages. Cloth, \$5.50.

Immigrants and Their Children, 1850-1950, by Edward P. Hutchinson. June 1956. 408 pages. Cloth, \$6.50.

Social Characteristics of Urban and Rural Communities, 1950, by Otis Dudley Duncan and Albert J. Reiss, Jr. September 1956. 458 pages. \$6.50.

OTHER BOOKS

The American Experience of Swedish Students: Retrospect and Aftermath, by Franklin D. Scott. Minneapolis: University of Minnesota Press, June 1956. About 160 pages. Cloth, \$3.00.

Economic Growth: Brazil, India, Japan, edited by Simon Kuznets, Wilbert E. Moore, and Joseph J. Spengler. Durham, N. C.: Duke University Press, 1955. 626 pages. Cloth, \$12.50.

Social Forces in the Middle East: Papers Presented at a Conference Sponsored by the Committee on the Near and Middle East, edited by Sydney N. Fisher. Ithaca: Cornell University Press, September 1955. 298 pages. Cloth, \$5.00.

SOCIAL SCIENCE RESEARCH COUNCIL

230 PARK AVENUE, NEW YORK 17, N. Y.

Incorporated in the State of Illinois, December 27, 1924, for the purpose of advancing research in the social sciences

Directors, 1956: TAYLOR COLE, FRED EGGAN, ROBERT E. L. FARIS, R. A. GORDON, LOUIS GOTTSCHALK, PENDLETON HERRING, E. ADAMSON HOEBEL, D. GALE JOHNSON, V. O. KEY, LYLE H. LANIER, EARL LATHAM, DONALD G. MARQUIS, JOHN P. MILLER, PHILIP E. MOSELY, FREDERICK MOSTELLER, FRANK C. NEWMAN, ROY F. NICHOLS, CARROLL L. SHARTLE, RICHARD H. SHRYOCK, MORTIMER SPIEGELMAN, CONRAD TAEUBER, ROBERT L. THORNDIKE, SCHUYLER C. WALLACE, RALPH J. WATKINS, S. S. WILKS, GORDON R. WILLEY, MALCOLM M. WILLEY, ROBIN M. WILLIAMS, JR., C. VANN WOODWARD, DONALD YOUNG

Officers and Staff: PENDLETON HERRING, *President*; PAUL WEBBINK, *Vice-President*; ELBRIDGE SIBLEY, *Executive Associate*; HAROLD E. JONES, *Pacific Coast Representative*; BRYCE WOOD; ELEANOR C. ISBELL; JOSEPH B. CASAGRANDE; M. BREWSTER SMITH; ROBERT N. WILSON; CATHERINE V. RONNAN, *Financial Secretary*